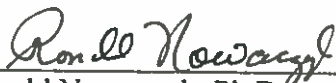


# ARTICULATION AGREEMENT

**Hagerstown Community College**  
**Associate of Science in Computer Science**

**Frostburg State University**  
**Bachelor of Science in Computer Science**

Entered into this 15<sup>th</sup> day of October, 2018.  
(date) (month)



Ronald Nowaczyk, Ph.D.  
President  
Frostburg State University



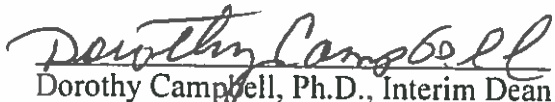
James S. Klauber, Sr., Ph.D., President  
Hagerstown Community College



Elizabeth Throop, Ph.D., Provost  
Frostburg State University



C. David Warner, Ed.D.  
Vice President of Academic Affairs and Student  
Services  
Hagerstown Community College



Dorothy Campbell, Ph.D., Interim Dean  
College of Liberal Arts and Sciences  
Frostburg State University



Vidda Beache, Director  
Technology and Computer Studies Division  
Hagerstown Community College



George Rinaud, Ph.D., Chair  
Department of Computer Science and  
Information Technologies  
Frostburg State University

This agreement is effective with new Frostburg State University admits Fall 2018. This agreement will be reviewed annually.

## ARTICULATION AGREEMENT

Hagerstown Community College, Associate of Science in Computer Science and Frostburg State University, Bachelor of Science in Computer Science.

### RECITALS

Hagerstown Community College (hereafter referred to as “HCC”), a community college in Washington County, Maryland, and Frostburg State University (“FSU”), a comprehensive regional institution in Western Maryland and a constituent institution of the University System of Maryland, agree to offer an articulated program leading to the award of an Associate of Science (A.S.) in Computer Science Degree and a Bachelor of Science (B.S.) in Computer Science. The parties further agree that students from HCC, through this articulation agreement, will be permitted to transfer credits earned for the A.S. at HCC to FSU, leading to the award of the B.S. degree in Computer Science at FSU.

#### I. Purpose

- a. It is the intent that this articulation agreement will facilitate a smooth transition from HCC’s Computer Science program to the B.S. in Computer Science at FSU. As a result of this articulation agreement, HCC graduates will understand how FSU transfers the credits earned at HCC, as well as the changes in requirements that may permit more flexible scheduling once the student has been admitted to and enrolled at FSU. This agreement provides a systematic plan for students to receive both the A.S. degree from HCC and the B.S. degree in Computer Science from FSU.
- b. This agreement sets forth a clear set of responsibilities and expectations for both institutions. The parties agree to work collaboratively to meet the needs of HCC graduates in facilitating transfer to FSU.
- c. HCC encourages graduates to continue their educational pathway in Computer Science for both personal and professional development, as well as career advancement in the profession. This articulation agreement for completion of the B.S. in Computer Science facilitates students’ successful achievement of credentials in the field.

## **II. Requirements of the Program**

- a. The program is designed for graduates of the A.S. degree in Computer Science at HCC. Students must complete the A.S. degree at HCC in order to participate in the transfer program. A maximum of seventy (70) credit hours from HCC will be allowed toward fulfillment of the one hundred twenty (120) credit hours required for completion of the B.S. degree.
- b. After completion of the A.S., and upon admittance by FSU, the student may commence the B.S. in Computer Science.
- c. Computer Science students from HCC will have their coursework evaluated by FSU to determine which FSU general education requirements and discipline requirements have been met. HCC courses shall be evaluated by FSU for transferability, and FSU shall accept courses for transfer at its sole discretion. By taking full advantage of the HCC-FSU course agreements described below, the transfer student will matriculate at FSU with junior standing.
- d. In accordance with Code of Maryland Regulations (COMAR), all courses meeting general education requirements at HCC will transfer to FSU as general education courses.
- e. Students must maintain a 2.0 cumulative grade point average at HCC in order to transfer to the FSU B.S. in Computer Science Program.
- f. The maximum number of credits that will be accepted by FSU toward degree requirements from non-direct classroom instruction (including CLEP, AP, and other nationally recognized standardized examination scores) is thirty (30) credits. Tech Prep credits will transfer if recorded on HCC's transcript. Credit awarded for experiential learning ("life experience") is recognized by, and is transferable to, FSU if recorded on HCC's transcript.
- g. HCC students who have completed the A.S. in Computer Science degree will be given every consideration for financial assistance and will be eligible to compete for academic scholarships at FSU.
- h. This agreement becomes effective on the date set forth on the first page of this document. HCC and FSU agree to publicize this program. The parties further agree to monitor the performance of the program and to make revisions as may be mutually agreed upon as necessary. Changes or amendments to this agreement must be made in writing and appended to this agreement.
- i. This agreement may be terminated by either party with one year written notice to the other. The parties agree that termination shall include an agreement that students currently enrolled in the program at the time of termination shall be permitted to complete the program as described herein.

### III. A.S. in Computer Science-B.S. in Computer Science Transfer Courses

The following indicates the transfer of course agreement between the HCC and FSU:

a. General Education Requirements to be completed at HCC

<b>HCC GEP Requirements</b>	<b>HCC</b>	<b>Transfers to FSU as:</b>
ENGLISH (6cr.)	ENG 101 and one other course from among ENG 102, 201, 202, 203, 204, 205, or 206	ENGL 101 and Satisfies 3 cr. of FSU Humanities requirements
ARTS/HUMANITIES (6cr.)	PHL 101 or Foreign Language course to satisfy remaining 3 cr. of FSU Humanities requirements and One other course to satisfy Fine and Performing Arts requirement (3 cr.)	Group A (Fine and Performing Arts) and Group B (Humanities)
SOCIAL SCIENCES (6cr.)	Any approved General Education course in Behavioral/Social Sciences except HIS courses	Group D (Social and Behavioral Sciences) – Satisfies two courses required
MATHEMATICS (4cr.)	MAT 203 satisfies FSU GEP and Computer Science requirements	GEP Core Skill in math and required in Computer Science degree program
NATURAL SCIENCE (8cr.)	Biological/Physical Science (one of the two courses must have a lab)	Group C (Natural Sciences)
DIVERSITY (3cr.)	Any approved General Education course in the Diversity category	Satisfies FSU Identity and Difference course requirement

Total General Education Credits Taken at HCC = 33 credits
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b. FSU Computer Science Requirements to be completed at HCC

In addition to the general education requirements indicated in the preceding section of this articulation agreement, the B.S. degree with a major in Computer Science at FSU requires students to successfully complete the following course work:

Frostburg State University			HCC Program Equivalent
Course Number	Course Title	Credit Hours	
COSC 240	Computer Science I	4.0	CSC 132 and CSC 134
SCIA 120	Intro. to Secure Computing and Information Assurance	3.0	IST 160 (Students should select this course as their List 1 Restricted Elective)
MATH 236	Calculus I	(4.0)	MAT 203 (GEP)
<b>Select two of the following (List 2 Restricted Electives – 8 credits):</b>			
MATH 237	Calculus II	4.0	MAT 204 (List 2 Restricted Elective – will satisfy FSU degree requirement)
MATH 432	Differential Equations	4.0	MAT 206 (List 2 Restricted Elective – will satisfy FSU degree requirement)
MATH 350	Linear Algebra	4.0	MAT 208 (List 2 Restricted Elective – will satisfy FSU degree requirement)
Program Requirements Transferred = 15			

c. Additional Courses to be completed at HCC:

Frostburg State University			HCC Program Equivalent
Course Number	Course Title	Credit Hours	
ITEC 195	Elective	3.0	CSC 102
	General Electives (any)	10.0	
Program Requirements Transferred = 13			

f. B.S. in Computer Science Degree Requirements to be completed at FSU

Frostburg State University			Notes
Course Number	Course Title	Credit Hours	
COSC 101	The Discipline of Computer Science	3.0	
COSC 102	Foundations of Computer Science	3.0	
COSC 241	Computer Science II	4.0	
COSC 325	Software Engineering	3.0	
COSC 365	Digital Logic	3.0	
COSC 460	Operating Systems Concepts	3.0	
COSC 489	Computer Science Capstone	3.0	
COSC 310	Data Structures and Algorithm Analysis	3.0	
COSC 331	Fundamentals of Computer Networks	3.0	
COSC 350	Low-Level Programming Concepts	3.0	
COSC 444	Intro. to Parallel Computing	3.0	
COSC 450	Programming Language Principles and Paradigms	3.0	
COSC 485	Intro. to the Theory of Computation	3.0	
MATH 380	Intro. to Probability and Statistics	3.0	
Science	Select one from BIOL 160, BIOL 161, CHEM 202, or PHYS 262	4.0	
CMST 102	Intro. to Human Communication	3.0	
ENGL 338	Technical Writing	3.0	Satisfies general education requirement
	Computer Science Electives	6.0	Select from approved list in catalog
<b>Total Credits to be Completed at FSU: 59</b>			

g. Course Sequencing

Computer Science students transferring to the B.S. in Computer Science Program at FSU shall be notified by HCC and FSU that the B.S. in Computer Science curriculum is built upon a series of established course sequences. For students to progress through the program, they must have the appropriate pre-requisites, corequisites, and must maintain a minimum 2.0 GPA.

Students wishing to participate in the program should develop an education plan at HCC by contacting:

Trudy Gift

Professor, Technology and Computer Studies Division  
240-500-2214  
[tgift@hagerstowncc.edu](mailto:tgift@hagerstowncc.edu)

HCC will direct students interested in participating in the A.S. in Computer Science program to apply for admission to FSU, indicating Computer Science as the intended major. Applications can be submitted online at: <http://gobobcats.frostburg.edu/appentry.htm>.